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HOW STABLE ARE SOCIAL PREFERENCE WEIGHTS FOR EQ-5D: RESULTS FROM A PARTIAL REPLICATION STUDY

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In 1993 a national population survey was conducted in the UK to determine social preference weights for EQ-5D health states. The survey, conducted as part of the Measurement and Valuation of Health (MVH) Project was based on face-to-face interviews with 3395 respondents who used ranking, VAS rating and time trade-off (TTO) methods to generate social preference weights. The TTO weights derived from that survey are widely used in economic studies in which EQ-5D is used to measure outcomes. **OBJECTIVES:** To test the stability of social preference weights over time using a partial replication protocol. **METHODS:** Face-to-face interviews were conducted with 253 individuals randomly selected from electoral registers in geographically convenient locations. The protocol varied somewhat from the original MVH study in that each respondent was asked to value a standard set of 17 health states. Responses were weighted to achieve matching with the age/gender mix of the MVH study. Fieldwork was conducted in 1998. **RESULTS:** The rank order of health states was highly similar in the two surveys. VAS ratings were well approximated in the replication survey. TTO weights were higher in the second survey, with fewer states being valued as worse than dead. The median absolute difference in TTO preference weights was 0.080. An OLS model used to interpolate values for unobserved EQ-5D health states yielded lower parameter estimates for the extreme levels on each dimension in the 1998 data. **CONCLUSIONS:** Social preference weights can and do vary over time. An apparent shift in the value of dead relative to EQ-5D health states may account for a reduction in the number of states assigned a negative weight. Although the absolute value of outcomes may depend upon which set of weights is used, marginal differences in outcome may remain unaffected.

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DEVELOPING A PREFERENCE-BASED MEASURE FOR POSTMENOPAUSAL HEALTHBrazier JE¹, Zoellner YF², Platts M¹, Towers I¹¹University of Sheffield, Sheffield, United Kingdom; ²Solvay Pharmaceuticals, Hannover, Germany

OBJECTIVE: To develop a preference-based index for (post-) menopausal health, the latter including typical menopausal *symptoms* as well as potential *side-effects* of their causal treatment, i.e. hormone replacement therapy (HRT). **METHODS:** The study had three phases: 1) the development of a health state classification system; 2) a valuation survey; and 3) the estimation of a model for valuing all states defined by the system. A menopausal

health state classification system with the seven dimensions (QPI-7D) was developed, including hot flushes, aching joints or muscles, anxious or frightened feelings, breast tenderness, bleeding, vaginal dryness and undesirable androgenic signs. Each dimension contains between 3 and 5 levels and defines a total of 6075 health states. A sample of 96 health states was selected for empirical valuation. These states were valued by a sample of 229 women aged 45 to 60 (37% postmenopausal, 33% on HRT), randomly selected from 6 general practice lists in Sheffield, UK. Respondents were asked to complete a time trade-off (TTO) task for 9 health states (their own plus 8 described states), resulting in an average of 16.5 values for each health state. **RESULTS:** Mean health state values ranged from 0.48 to 0.98. Own health was valued at 0.91 (mean). An additive random effects model of reasonable fit could be specified. Decrements for each level of symptoms reaching statistical significance were estimated. The general order of decrements (from highest to lowest) is: aching joints and muscles, bleeding, breast tenderness, anxious or frightened feelings, vaginal dryness, and androgenic signs. While "hot flushes" did reach statistical significance in the current HRT user/past sufferer subsample, it did not enhance model fit in the overall sample. **CONCLUSION:** This model provides a methodologically sound and credible algorithm for valuing menopausal health on the basis of the underlying health state classification system, the QPI-7D.

DIABETES

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ACARBOSE FOR THE PREVENTION OF TYPE II DIABETES IN CANADA: AN ECONOMIC EVALUATIONGetsios D¹, Caro JJ², Caro I³, Klittich W², O'Brien JA²¹Caro Research Institute, Hammonds Plains, NS, Canada;²Caro Research Institute, Concord, MA, USA; ³Caro Research Institute, Dorval, QC, Canada

OBJECTIVE: To evaluate the cost-effectiveness of acarbose for the prevention of type II diabetes in Canadian patients with impaired glucose tolerance (IGT) compared to no treatment, metformin, and lifestyle modification. **METHODS:** A Markov model was developed to estimate outcomes for patients with IGT. Patients could revert to normal glucose tolerance, remain with IGT, develop diabetes, or die. Baseline transition probabilities were derived from the STOP-NIDDM study, a placebo-controlled trial of acarbose for the prevention of type II diabetes in IGT, and supplemented with data from other published trials. Direct costs were estimated for Ontario, in 2000 Canadian dollars. Patients were assumed to receive therapy for 5 years, and transitions were modeled over 10 years. Sensitivity analyses covered all inputs. Costs and outcomes were discounted at 5% per annum. **RESULTS:** Over a decade, 542 out of 1000 patients are expected to develop diabetes in the absence of an active